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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,887	08/20/2001	Shinji Shiraga	35.C15684	4036

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EXAMINER

SURYAWANSHI, SURESH

ART UNIT PAPER NUMBER

2115

DATE MAILED: 03/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,887

Applicant(s)

SHIRAGA ET AL.

Examiner

Suresh K Suryawanshi

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2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/17/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-27 are presented for examination.

Specification

2. The disclosure is objected to because of the following informalities: “returning to” should have been “returning from” at page 5, line 13.

Appropriate correction is required.

3. The disclosure is objected to because of the following informalities: “returning to” should have been “returning from” at page 5, line 16.

Appropriate correction is required.

4. The disclosure is objected to because of the following informalities: “SRAM 3” should have been “SDRAM 3” at page 14, line 2.

Appropriate correction is required.

Claim Objections

5. Claim 1 is objected to because of the following informalities: “returning to” should have been “returning from” at page 30, line 6 and 10. Appropriate correction is required.

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6. Claim 10 is objected to because of the following informalities: "returning to" should have been "returning from" at page 33, line 24 and 27. Appropriate correction is required.

7. Claim 19 is objected to because of the following informalities: "returning to" should have been "returning from" at page 37, line 16 and 19. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando (US Patent No 5,931,951).

9. As per claims 1, 10 and 19, Ando teaches

a central processing means capable of transferring from a normal operation mode to a power saving mode and returning to the power saving mode to the normal operation mode [col. 2, lines 21-27; col. 3, lines 52-56, 61-66; col. 10, lines 13-19; CPU has a normal operating mode and a power saving mode and has functions of making a transition from the normal operating mode to the power saving mode and making a return from the power saving mode to the normal operating mode];

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a main memory means capable of transferring from a normal operation mode to a power saving mode and returning to the power saving mode to the normal operation mode [col. 2, lines 28-35; col. 3, lines 57-60; col. 4, lines 1-5; col. 10, lines 20-30; memory attached to the CPU has a normal operating mode and a power saving mode and has functions of making a transition from the normal operating mode to the power saving mode and making a return from the power saving mode to the normal operating mode]; and

a setting means for setting transfer information of said main memory means from a normal operation mode to a power saving mode, wherein said central processing means executes a power saving mode transfer command after the transfer information is set by said setting means [col. 4, lines 21-23, 41-46; col. 5, lines 33-41; col. 9, lines 1-49; col. 13, lines 1-20; a power-down setting/control register is utilized for setting transfer information of the memory from a normal operating mode to a power saving mode and vice versa].

10. As per claims 7, 16 and 25, Ando teaches

a central processing means having a normal operation mode and a power saving mode [col. 2, lines 21-27; col. 3, lines 52-56, 61-66; col. 10, lines 13-19; CPU has a normal operating mode and a power saving mode and has functions of making a transition from the normal operating mode to the power saving mode and making a return from the power saving mode to the normal operating mode];

a main memory means having a normal operation mode and a power saving mode [col. 2, lines 28-35; col. 3, lines 57-60; col. 4, lines 1-5; col. 10, lines 20-30; memory attached to the CPU has a normal operating mode and a power saving mode and has functions of making a transition from the normal operating mode to the power saving mode and making a return from the power saving mode to the normal operating mode];

a storage means for storing transfer information of said main memory means from a normal operation mode to a power saving mode [col. 4, lines 21-23, 41-46; col. 5, lines 33-41; col. 9, lines 1-49; col. 13, lines 1-20; a power-down setting/control register is utilized for setting transfer information of the memory from a normal operating mode to a power saving mode and vice versa];

a detecting means for detecting a power saving mode transfer command sent to said central processing means [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59; a detecting means is inherent to the system as when SMI is generated to the CPU, SMM is executed and the power-down information for the memory is registered in the control register before the CPU enters the sleep mode]; and

a transfer control means for making said main memory means transfer to a power saving mode from a normal operation mode in accordance with the transfer information stored in said storage means and a detection by said detecting means [col. 10, lines 52-65; col. 13, lines 1-10;

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col. 14, lines 46-59; the system management mode (SMM) works as a transfer control means as the SMM executes the power saving routine to put the memory into power saving mode from a normal operation mode in accordance of power down control information in the control register].

11. As per claims 2, 11 and 20, Ando teaches a detecting means for detecting that said central processing means fetched the power saving mode transfer command [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59; a detecting means is inherent to the system as when SMI is generated to the CPU, SMM is executed and the power-down information for the memory is registered in the control register before the CPU enters the sleep mode]; and a transfer control means for transferring said main memory means to a power saving mode if said detecting means detects that the power saving mode transfer command is fetched after said setting means sets the transfer information [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59; the system management mode (SMM) works as a transfer control means as the SMM executes the power saving routine to put the memory into power saving mode from a normal operation mode in accordance of power down control information in the control register].

12. As per claims 3, 9, 12, 18, 21 and 27, Ando teaches a returning means for making said main memory means return to a normal operation mode irrespective of settings by said setting means, if said central processing means detects an external interruption for returning to a normal operation mode from a power saving mode while said main memory means is in the power saving mode [col. 10, line 66 -- col. 11, line 8; col. 13, lines 11-20; col. 14, lines 60-65].

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13. As per claims 4, 13 and 22, Ando teaches that the transfer information is a time taken to transfer to a power saving mode from a normal operation mode, and the information processing apparatus further comprises a transfer control means for controlling to transfer said main memory means to a power saving mode after a lapse of the set time of the transfer information [col. 11, lines 8-14; col. 14, line 66 -- col. 15, line 5].

14. As per claims 5, 14 and 23, Ando teaches that an instructing means for instructing a transfer to the power saving mode, wherein said transfer control means controls to transfer said main memory means to a power saving mode after the lapse of the set time of the transfer information, in accordance with an instruction of said instructing means [col. 10, lines 52 -- col. 11, line 14; col. 13, lines 1-20; col. 14, lines 46 -- col. 15, line 5].

15. As per claims 6, 15 and 24, Ando teaches that a notifying means for notifying that said central processing means was transferred to a power saving mode [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59]; and a transfer control means for transferring said main memory means to a power saving mode after the transfer information is set by said setting means, in response to a notice of said notifying means [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59].

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16. As per claims 8, 17 and 26, Ando teaches that transfer control means supplies said main memory means with a predetermined signal to make said main memory means to transfer to a power saving mode from a normal operation mode [col. 10, lines 52-65; col. 13, lines 1-10; col. 14, lines 46-59; power-down control signal].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suresh K Suryawanshi whose telephone number is 571-272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sks
March 4, 2005


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